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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/781,512	02/12/2001	James A. Genovese	DAM 533-00	6829

24211 7590 09/08/2006

US ARMY SOLDIER AND BIOLOGICAL CHEMICAL COMMAND
OFFICE OF THE CHIEF COUNSEL/IP TEAM (BLDG E4435)
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EXAMINER	
FERRIS III, FRED O	
ART UNIT	**PAPER NUMBER**
2128	

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/781,512	GENOVESE, JAMES A.	
	Examiner	Art Unit	
	Fred Ferris	2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 June 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *43-71* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *43-50 and 54-71* is/are rejected.

7)☒ Claim(s) *51-53* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04 June 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is responsive to applicants Amendment filed 12 June 2006. Applicants have now cancelled claims 1-42. New claims 43-71 are currently pending in this application. Of these, claims 43-50 and 54-71 stand rejected by the examiner. Claims 51-53 are objected to.

Response to Arguments

2. Applicant's arguments with respect to new claims 43-71 have been considered but are moot in view of the new ground(s) of rejection.

Claim Interpretation

3. Applicants are now claiming a computer method for hazardous incident decision support and training that includes acquiring signs and symptoms via a user interface for inputting an incident (potentially hazardous) situation and conditions, acquiring (chemical/biological) agent characteristics from a database of records representing known hazardous agents, and subsequently performing an identification of the agent by comparing the observed signs and symptoms with the agent characteristics data based on a timed response. The examiner submits that the subject matter as presently claimed, appears to merely be drawn to standard features available in numerous commercially available emergency management software packages such as SoftRisk, Incident Master, EM/2000, and Consequences Assessment Tool Set (CATS). (See: EM/2000, Swiatek et al (CATS), for example)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 43-50 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Publication 2001/0056435 A1 issued to Quick in view of "Emergency Response to Incident Involving Chemical and Biological Warfare Agents", Medici et al, NFPA Supplement 14, 1997.

Regarding independent claim 43: Quick teaches a computer method for hazardous incident decision support that includes acquiring data via a user interface (0065, Figs. 7a-7f) for inputting an incident (potentially hazardous) situation and conditions, acquiring (chemical/biological) agent characteristics (0026, 0044, 0065, 0065) from a database of records (0065-0067, Fig. 2) representing known hazardous agents (0040, 0044-45, 0064-0068).

Quick does not explicitly teach the identification of a particular agent by comparing the observed signs and symptoms with the agent characteristics data.

Medici discloses the identification of the agent (pages 19, 20) by comparing the observed signs and symptoms with "known" agent characteristics data (Tabs, S14-1 to S14-10). Medici specifically sets forth that agents should, and can be, identified by the recognition of "signs" and detection clues (page 19, para:6) and the specific signs and symptoms related to each agent. (pages 5-15, Tabs, S14-1 to S14-10) Hence, a skilled artisan would have knowingly implemented a database for identification of agents by comparing the observed signs and symptoms in database records in view the teachings of Medici.

It would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to modify the teachings of Quick relating to a first responder using chemical/biological software for acquiring observed sign and symptoms and storing them in a data base via a user interface, with the teachings of Medici relating to known hazardous agents associated with related agent symptoms, to realize the elements of the claimed invention. An obvious motivation exists since, as referenced in the prior art, rapid response and computer based support tools are essential in developing response procedures and training in order to minimize casualties in the event of a chemical/biological attack. (See: Quick/Medici, Abstract/Conclusion). Accordingly, a skilled artisan tasked with realizing a system and method for providing hazardous incident decision support and training, and having access to the teachings of Quick and Medici, would have knowingly modified the

teachings of Quick with the teachings of Medici (or visa versa) to realize the claimed elements of the present invention. Medici also sets forth the importance of identifying varies signs and symptoms associated with agents for purposes of the administration of appropriate drugs and overall incident management (page 14,para:3, Tab. S14) providing further motivation to combine Medici with the features of Quick.

Per dependent claims 44-50 and 54: Medici renders obvious "one or more" observed signs and time to onset data of symptoms as noted above. (pages 5-15, Tabs, S14-1 to S14-10) Assigning a unit value to the observed signs and symptoms amounts to indexing in order to find a match pointing to a particular item in the database and would have knowingly been implemented by one of ordinary skill in the art as a method of locating records. (See: "index" Microsoft Computer Dictionary 1997, "queries" are simply necessary database elements) Claims 46-50 include the use of "weighting" and "scoring" prior to access of records in the database and would also have knowingly been implemented by one of ordinary skill in the art in order to perform simple statistical analysis and ranking of the observed signs and symptoms relative to the stored database records. (See: Turcato et al, Section 2.2.1, for example) Agent identification by sensors and sampling is very well known in the art and would therefor been knowingly included by a skilled artisan (see: Policastro: pages 9, 23 or Dower: Figs. 3, 4, for example)

5. Claims 55 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Publication 2001/0056435 A1 issued to Quick in view

of "Simulation Analysis of Operation Respond in a Field Setting", Mathur et al, Operation Respond Institute, Texas A&M University, January 1997.

Regarding independent claims 55 and 64: These claims simply require a user interface describing a potentially hazardous situation and performing a time dependent hazard assessment base on elapsed time. As previously noted, Quick teaches a computer method for hazardous incident decision support that includes acquiring data via a user interface (0065, Figs. 7a-7f) for inputting an incident (potentially hazardous) situation and conditions, acquiring (chemical/biological) agent characteristics (0026, 0044, 0065, 0065) from a database of records (0065-0067, Fig. 2) representing known hazardous agents (0040, 0044-45, 0064-0068).

Quick does not explicitly teach performing a time-dependent hazard assessment based on the elapsed time.

Mathur teaches time-dependent hazard assessment of a simulated hazardous incident inclusive of elapsed time computation. (pages 10, 11, all) Mathur specifically sets forth the importance that elapsed time plays in post-incident response (page 7, para:1) for first responders. Hence, a skilled artisan having access to the teachings of Mathur would have found sufficient motivation, and knowingly implemented a time-dependent hazard assessment using the same reasoning previously cited above.

6. Dependent claims 56-63 and 65-71 are rejected in further view of "Emergency Response to Incident Involving Chemical and Biological Warfare Agents", Medici et al, NFPA Supplement 14, 1997.

Per claims 56-63 and 65-71: As previously cited above, Medici renders obvious "one or more" observed signs and time to onset data of symptoms as noted above. (pages 5-15, Tabs, S14-1 to S14-10) Assigning a unit value to the observed signs and symptoms amounts to indexing in order to find a match pointing to a particular item in the database and would have knowingly been implemented by one of ordinary skill in the art as a method of locating records. (See: "index" Microsoft Computer Dictionary 1997) The use of "weighting" and "scoring" prior to access of records in the database and would also have knowingly been implemented by one of ordinary skill in the art in order to perform simple statistical analysis and ranking of the observed signs and symptoms relative to the stored database records. (See: Turcato et al, Section 2.2.1, for example) Agent identification by sensors and sampling is very well known in the art and would therefor been knowingly included by a skilled artisan (see: Policastro: pages 9, 23 or Dower: Figs. 3, 4, for example)

Allowable Subject Matter

7. Claims 51-53 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. In this instance the prior art of record does not teach or render obvious the specific algorithm for the identification of agents within a database record as recited in dependent claims 51-51.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, ***THIS ACTION IS MADE FINAL.*** *See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).*

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

"Emergency response training: strategies for enhancing real-world performance", Ford et al, Journal of Hazardous Materials 75 (2000) 195-215, 2000 Elsevier Science teaches emergency response training.

"Adapting to User Preferences in Crisis Response", Iba et al, IUI 99' ACM 1999 teaches emergency and crisis response training and simulation.

"Adapting a synonym database to specific domains", Turcato et al, Simon Fraser University, August 2002 teaches statistical databases.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred Ferris whose telephone number is 571-272-3778 and whose normal working hours are 8:30am to 5:00pm Monday to Friday. Any inquiry of a general nature relating to the status of this application should be directed to the group receptionist whose telephone number is 571-272-3700. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached at 571-272-2279. The Official Fax Number is: (703) 872-9306

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